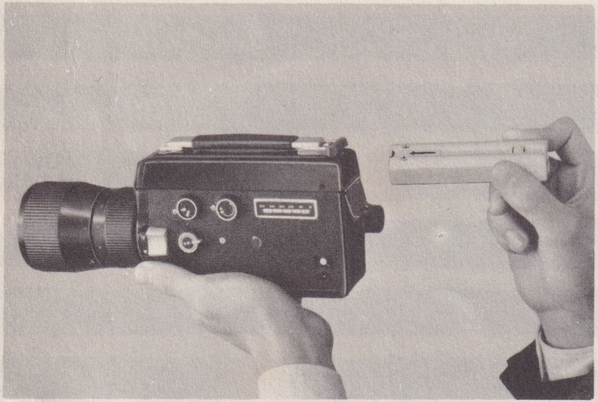
**ELMO**

**SUPER 110**

# HOW TO USE YOUR ELMO SUPER 110

# CONDENSED INSTRUCTIONS FOR SHOOTING OUTDOORS:

**1**



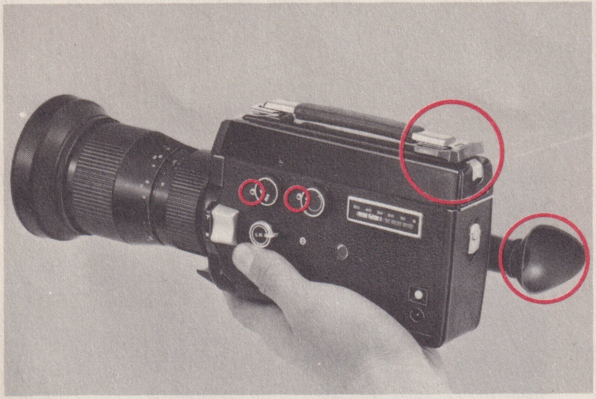
**Install batteries**

- Four, size AA(U.S.A) or size R6 (Europe), high performance penlight batteries.

**2**

**Insert Super 8 film cartridge.**

**3**



**Before depressing the shutter release, check the following:**

- The camera speed dial is set the speed desired, 18 or 24 fps.
- The AM exposure control dial is set at A for automatic exposure or M for manual.
- The filter key is in the rear of the hand strap bracket.
- The finder eyepiece is adjusted to your own eyesight.

**4**

**Focus and shoot.**

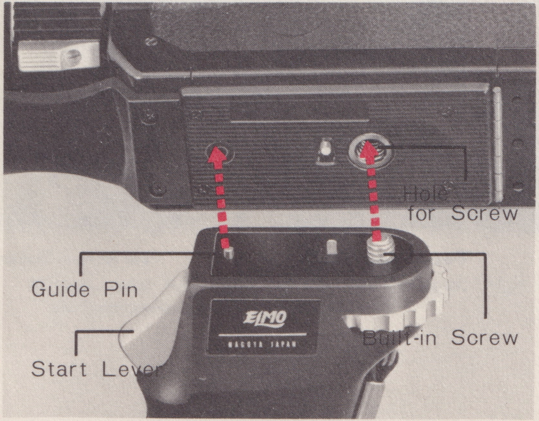
# How to Use Accessories

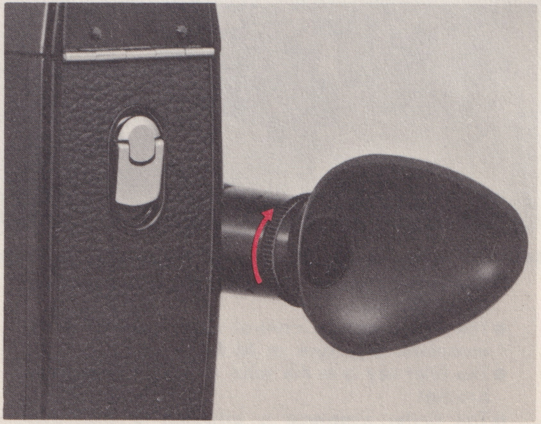
## Grip-T

Make sure that the guide-pin of the Grip-T is in a hole at the bottom of the camera, and fix the grip with attached screw. Open the shutter release-cover of the camera and pull the start trigger, and then the camera starts to operate.
Camera does not operate unless the shutter release-cover is kept open. (Refer to page 13)

## Eye-cup

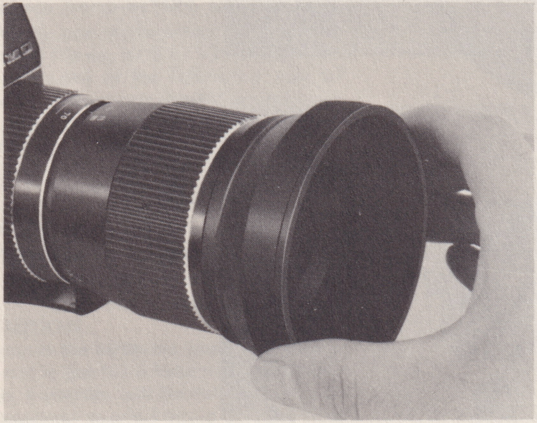
Screw in eye-cup onto viewfinder. Eye-cup will make it much easier to look through the viewfinder.


Hole for Screw
Guide Pin
ELMO
NAGOYA JAPAN
Built-in Screw
Start Lever

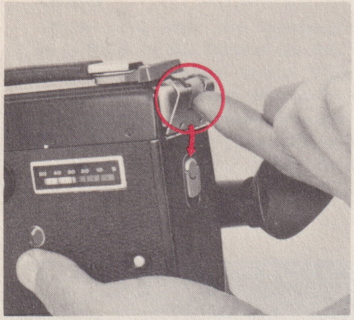


### Lens-hood (Fold-Type)

Lens-hood blocks flare of lens and works as shade against back light, or other diffused light, and helps to maintain proper exposure.

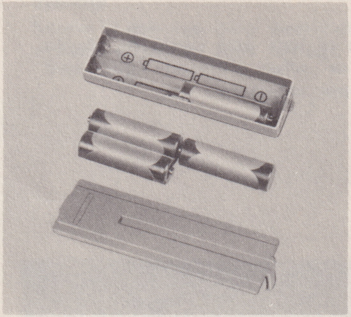


# 1 Installation of Batteries:



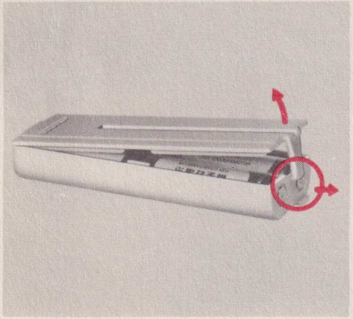
**1**

Pull the battery compartment lock out to open the cover.
Remove the plastic battery case.



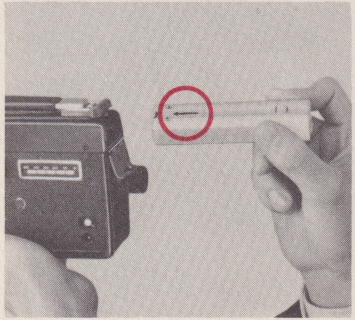
**3**

Insert four, size AA, (U.S.A.) or size R6 (Europe), high penlight batteries into the case by following the battery drawings inside the case.



**2**

Open the battery case lid by pulling up the catch out.



**4**

Put the battery case back in the camera.

## Battery Power Check

In case of battery power check, observe the movement of the exposure indicator needle in the viewfinder by pushing the battery test button. If the needle is within the indented zone with the mark "BATT" at the bottom of the viewfinder, battery power is enough for proper operation of the camera.

If the needle moves out of the indented "BATT" zone to the left, please replace batteries with new ones.

Usually one replacement of batteries covers filming of 8 to 10 rolls of films, but in case of the following, use of the accessory attachment power pack is recommended, since the batteries deteriorate rapidly:

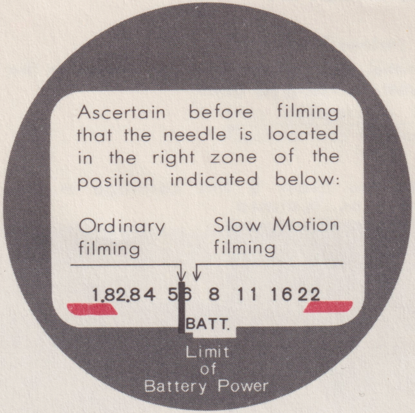
(1) Making long Slow Motion filming frequently.

(2) Filming many rolls of films continuously.

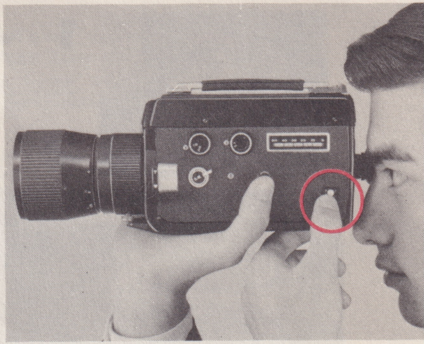
(3) Filming under such low temperature circumstances as in a ski ground, a skating rink, etc.

**CAUTION**

Remove the batteries when the camera is not in use for a long time, otherwise the batteries will be discharged, or sometimes spoiled liquid may leak out of the batteries and smear the battery case.

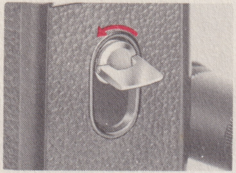


Ascertain before filming that the needle is located in the right zone of the position indicated below:



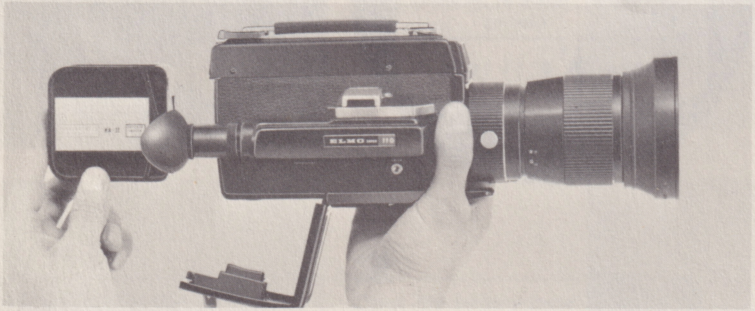
Automatic exposure control device for super 110 camera is built with voltage-stabilizer IC unit and this IC unit, being operated by the driving power of the camera, supplies steady flow of electricity to exposure control so that proper exposure is attained all the time. Therefore you need not worry about the wear of the mercury battery.

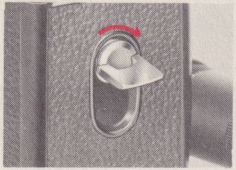
# 2 Loading the Camera:



**1** Pull the rear cover lock out and turn it counterclockwise to open.

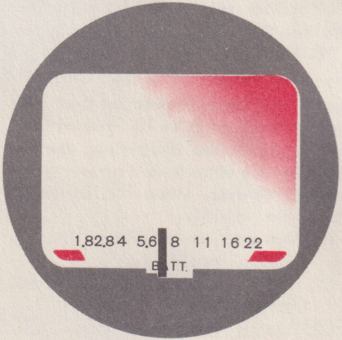
**2** Insert the Super 8 film cartridge in the camera as illustrated.



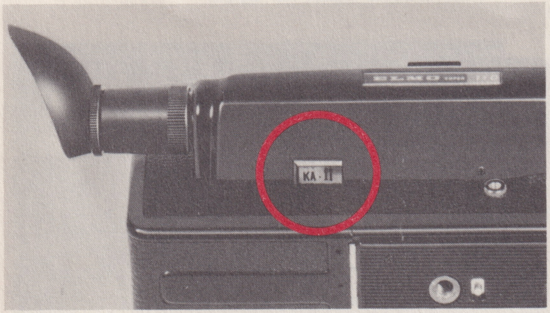


**3** Close the rear cover and turn the cover lock clockwise.

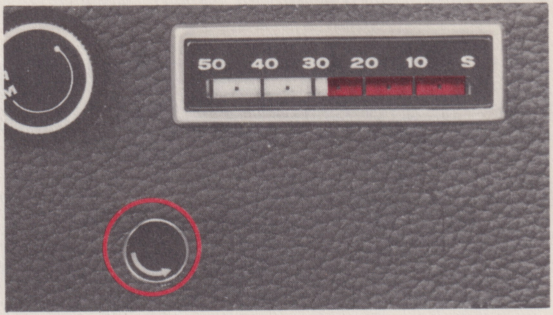
**End-of-Film Indicator:**
When you load the Super 8 cartridge into the camera, the red flag in the upper right corner of the viewfinder will disappear. This flag will appear again when you have exposed the full 50 feet of film.



**Film Type Window:**
The type of film loaded in the camera will appear in this window.



**Footage Counter:**
The Footage Counter turns to red as film footage is exposed. You can keep shooting until the red flag appears in the finder even after the Footage Counter has turned completely red.



**Film Transport Indicator:**
The Film Transport Indicator rotates in the direction of the arrow when the shutter release is depressed with film in the camera.
When the indicator stops turning and the red end-of-film indicator appears in the finder, the complete 50 feet of film is exposed.

# 3 Before Depressing the Shutter Release:

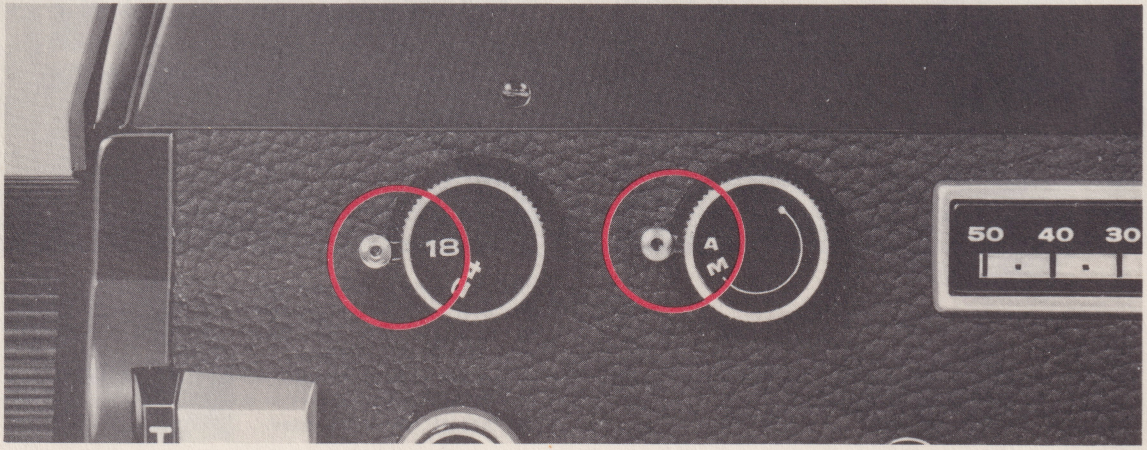
**● Set the camera speed dial properly.**

For ordinary shooting, set the speed dial at 18. If you are planning to make a sound movie or are shooting fast sports action, set the dial at 24.
To change camera speed, turn the dial while slightly depressing the lock.
The dial should not be set between 18 and 24 fps.
For single frame photography, refer to page 16.

**● Set the AM dial properly.**

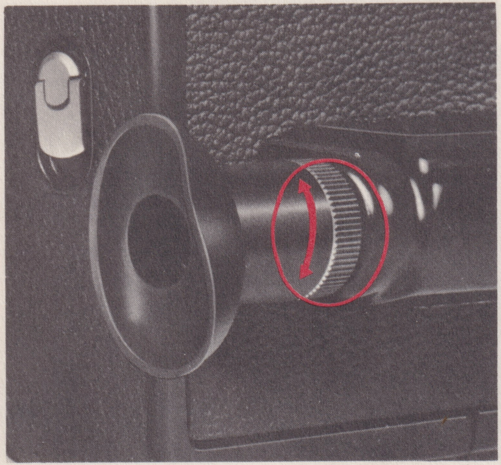
For Automatic Exposure Control, set the AM dial at A. For the use of the M(Manual Exposure Control) position, refer to page 16.

Note: The exposure control system will work neither on automatic nor manual control, unless the start release cover is open.



### ● Set the focusing eyepiece.

If the frame and figures in the viewfinder is not sharp enough, turn the eyesight abjustment ring to adjust the finder to your own eyesight.

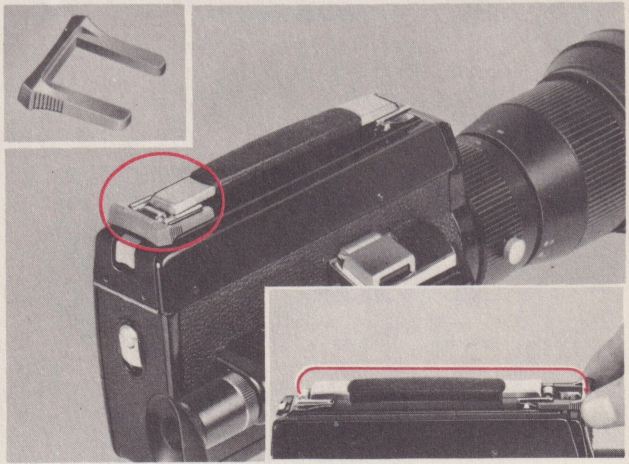


### ● Filter Key

Super 8 color film cartridges are currently available for Kodachrome II Type A (indoor) film. Since this is an indoor film, a #85 filter is needed if you use Super 8 outdoors. Your Super 110 has a built-in #85 filter, which is automatically positioned in front of the film when a Super 8 cartridge is inserted.

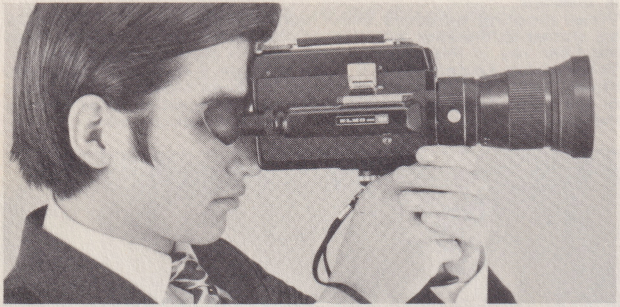
When shooting outdoors under natural light, the filter key must be stored in the rear position of the hand strap bracket. With the filter key in this position, the filter is in the optical path.

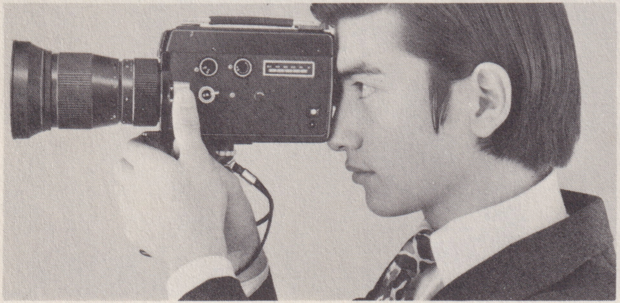
When using Kodachrome II Type A Super 8 color film under artificial light, you must either mount the Elmo Movie Light Bracket or the Filter Key onto the front seat of the hand strap to remove the built-in Type A (#85) tilter from the optical path.



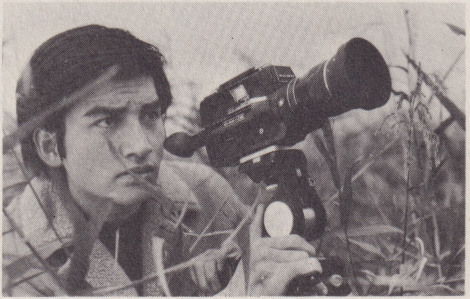
# 4 Now, you are ready to shoot!

**How to hold the camera:**
For easiest operation of camera and best results, hold the camera as shown by pictures below.

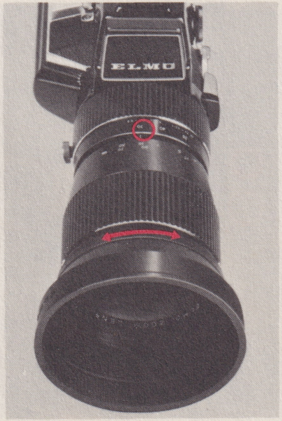




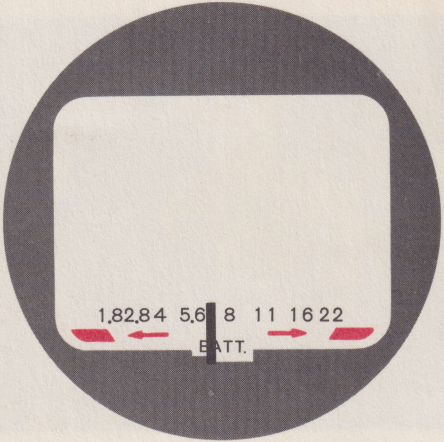
**Tripod:**
A tripod is recommended for steady telephoto and wide-angle filming.



**Focusing:**
Look through the viewfinder and rotate the focusing ring until the image in the Micro Split-image focusing zone becomes sharp and clear. It is easiest to make this adjustment with the zoom lens set to the extreme telephoto position (70mm).



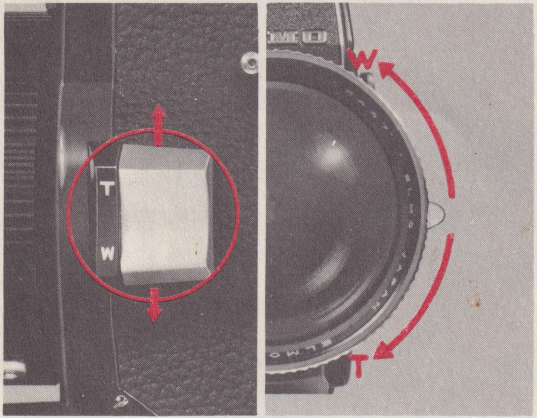
**Exposure indicator needle:**
When there is insufficient light for filming, the needle swings into the area on the far left of the aperture scale. When there is too much light for filming, the needle swings into the area on the far right.
When it is too bright (needle at the far right of scale), use the ND4 filter to reduce the amount of light. When it is too dark (needle at the far left of scale), use the Elmo movie light.



**Zooming:**

When you push the zooming button up to the "T" position, the lens will move to the Telephoto position (70mm). When you push it down, the lens will move to the Wide-Angle position ( 7mm).

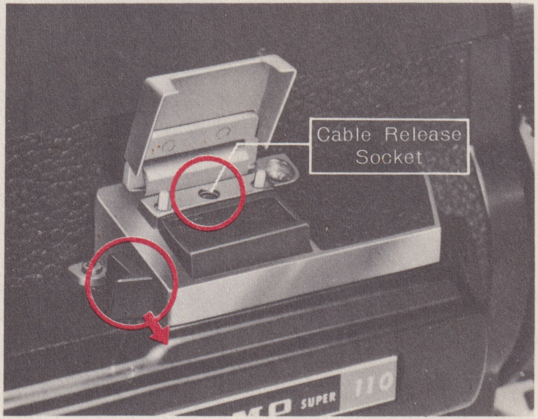
The complete zoom cycle from 7 to 70mm or vice versa takes 7.5 seconds with the power zoom. The zoom lens can be controlled manually with the lever on the lens, if desired.



**Shutter release:**

The shutter release has a metal cover over it to prevent accidental filming when the camera is being carried. When the cover is closed, all electrical circuits in the camera are shut off and the meter and power zoom will not work. To save batteries, close the shutter release cover each time you stop filming.

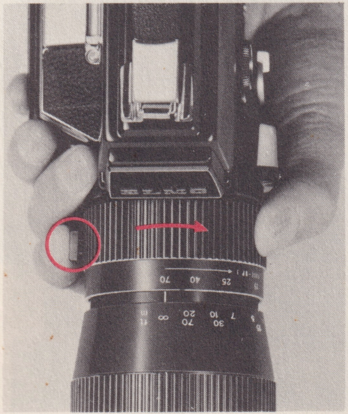
- **Continuous run and cable release:**
  For continuous run, pull out the black lock lever (circled below) while depressing the shutter release. The shutter release will then stay down. This feature can be used for filming yourself with the camera placed on a tripod or for continuous photography. A cable release is recommended when the camera is used on a tripod.

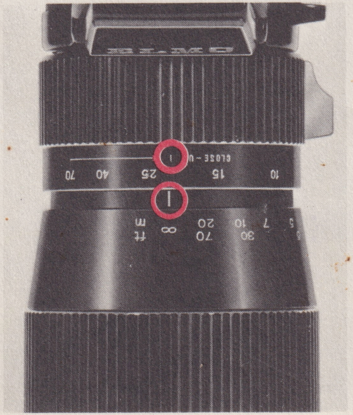


## Ultra Close-up

To set the camera in position for Ultra Close-up shooting, turn the zooming ring fully to "70mm side." Press the red button, then turn slowly the ring to "7mm" side for Ultra Close-ups. To reset the camera for ordinary shooting after Ulra Close-ups, turn the ring back fully to 70mm side until "click" touch is felt.

The camera assures needle sharp ultra close-ups when the lens-face-to-subject distance is longer than about 14cm (5½") or the film-to-subject distance is longer than about 30cm (12"). When the red line ahead of the red arrow on the zooming ring is aligned with the index as illustrated below, the camera is set to focus on the subject at the distance of about 14cm from the lens face or about 30cm from the film. (As the lens-face-to-subject distance becomes shorter than about 14cm, the corners of the picture filmed may be slightly distorted with the most part of the picture being in sharp focus.)





## Slow Motion Filming

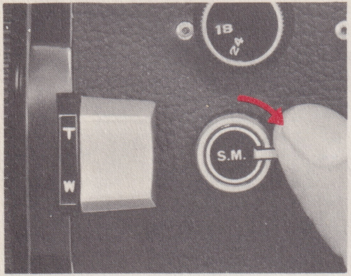
Slow motion picture is attained by filming at high speed and reproducing at ordinary speed of 18 fps. on projector. This is very effective for representing objects in slow and soft movement, and for an analysis of movements of sports in action.

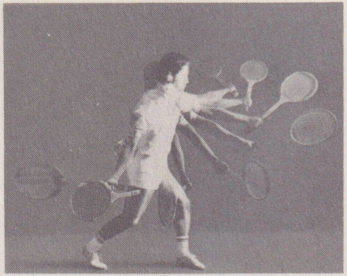
Ordinary shooting is simutaneously switched to Slow Motion Filming simply by pushing the SM lever down. (See Picture Below) (Film Speed: 54 fps., Shutter Speed: 1/125 second) And ordinary shooting is resumed by letting the SM lever spring back to ordinary position.

## ATTENTION

When the camera is operated from ordinary shooting to SM shooting or vise versa, some inappropriate exposure, if just a second, might be noticed on the film after reproducing it onto scene but this is not the failure of the camera but simply a phenomenon of exposure, which requires a small second to adjust between ordinary and SM speed.

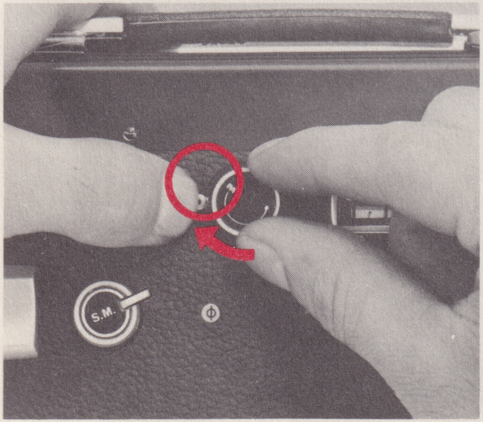
For SM filming from the start, push SM lever down first and depress the shutter release.





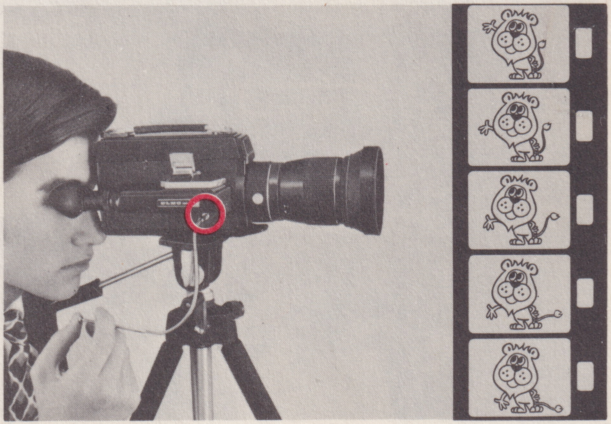
## Manual exposure control:

When you want to use manual exposure control to create special effects or to improve exposure in back-lighted scenes, push down the Automatic Exposure Control Lock and turn the A-M knob from the A to the M. Now, when you look through the viewfinder, the needle will move manually as you turn the knob.



## Animation photography:

Use of the cable release permits you to shoot one frame at a time to make animated films.
Exposure is automatically controlled.



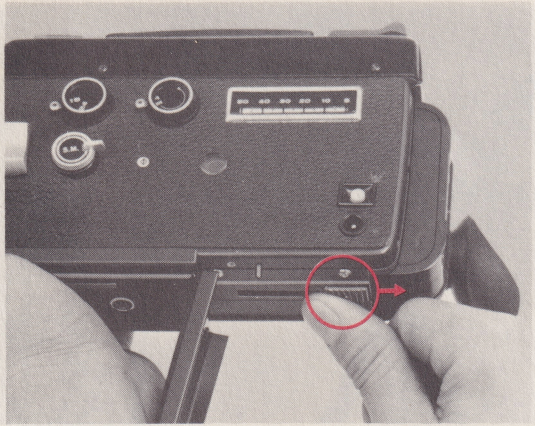
**Removing the film:**

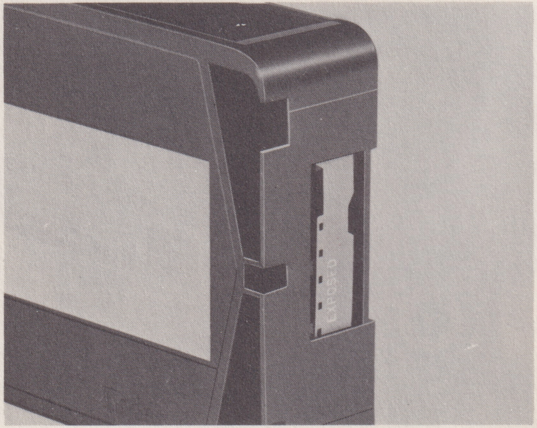
When the film transport indicator stops and the red flag appears in the upper right corner of the viewfinder, you have exposed all the film in the cartridge. Open the rear cover (the footage counter will reset) and pull out the cartridge with the sliding red button located beneath the cartridge compartment. The word "EXPOSED" will appear on the end of the film in the cartridge.

**For processing:**

Take your film to your photo dealer for processing or use prepaid processing mailers.

Note: When the camera will not be used for a long time, remove the batteries to prevent camera damage that may be caused by corrosive chemicals from the batteries.



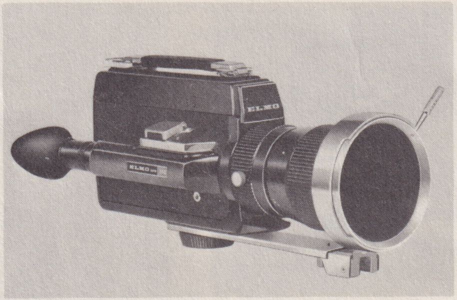


# Accessories:

---

## Fader:

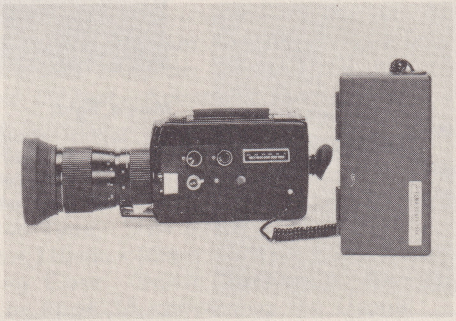
The fader is used for ultra-smooth fade-outs and fade-ins. It is supplied in its own handsome case and can be assembled and mounted on the camera in a minute. The fader lenses can be flipped down when not in use.

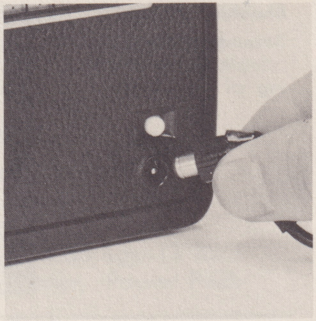


---

## Power Pack

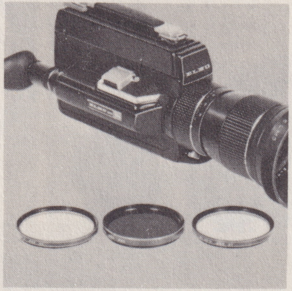
This is very helpful for shooting a number of films consecutively, for long Slow Motion filmings and for shootings under low temperature atmosphere and also for Remote Control Shooting (Four Batteries; Size C).





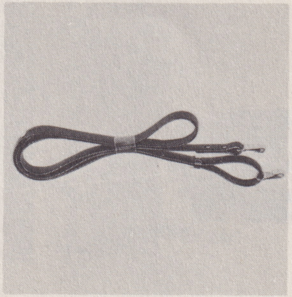
**Filters:**

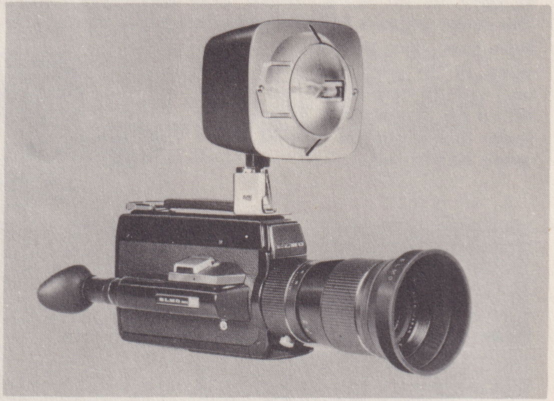
UV filter (SL 39) for eliminating ultra-violet rays and for protecting the lens, ND×4 filter for reducing the incident light, 1A filter for cutting ultra-violet rays and decreasing the blue color, and 82A filter for raising color-temperature are available.



**Shoulder strap:**

Shoulder Strap is available for easy carrying of the camera.





**Movie light:**

For indoor photography, use Elmo movie light. The Elmo movie light is accompanied by a movie light bracket, which automatically retracts the built-in Type A (#85) filter when attached to the camera.

# ELMO 8MM MOVIE CAMERA Super 110
## Specifications:

**Type :** Super 8mm Movie Camera
**Lens :** 7 to 70mm f/1.8 10 times zoom lens
**Zooming :** Power Zoom or Manual T-W 7.5/second
**Film Speed :** 18, 24, SM (Approx. 54 fps) and Single Frame.
Four High Performance Penlight Batteries (Europe: R6, U.S.A: AA) which cover shooting of 8-10 rolls of film.
**Exposure :** CdS "Through-The Lens" EE System. Specific Voltage Stabilizer using IC Unit. Manual Control also possible.
**Viewfinder :** Single Lens Reflex System, Micro Split-image Focusing System, 1.5m (5 ft) to infinity (∞). End-of-Film Warning, Battery Check Indicator and F stop, Adjustable Eyepiece (−3 to +1 diopters)
**Ultra Close-up :** Focusing of sharp image is Max.5.5in.(14cm) from the surface of lens.
**ASA :** Daylight ································ 25, 40, 64, 100, 160
Artificial Light ························ 40, 64, 100, 160, 250
**Slow Motion :** SM Filming to Normal Filming without interruption or vise-versa (Frame speed: Approx. 54 fps.)
**Film Counter :** Forward 50 feet, Automatic Reset Type.
**Others :** Remote Control Shooting, Consecutive Shooting.
**Filter :** Type A (No. 85) built-in.
**Film Transport Indicator :** Rotating arrow tells proper transport of film.
**Film Type Window :** Possible to confirm the type of film in the camera.
**Filter Size :** Screw-in Type, Size 62mm
**Dimensions & Weight :** 258mm×110mm×82mm (10.16×4.33×3.23 in.) 1.35 kgs. (3 lbs.)
**Accessories :** Carrying Case, Grip-T, Lens-hood, Eye-cup, Fader, Power Pack (Refer to Page 18 concerning the Usage)

ELMO

**ELMO CO., LTD.** NAGOYA JAPAN